

AMENDMENTS TO THE CLAIMS

Claim 1 (Previously Presented): A powdery, water-soluble, cationic polymer composition comprising:

at least two cationic polymers of different composition in the cationic groups, wherein a first cationic polymer is formed by radical polymerization of monomer constituents in the presence of a second cationic polymer in an aqueous solution,

wherein the polymerization of the first cationic polymer takes place in an aqueous solution of the second cationic polymer according to the method of adiabatic gel polymerization, and the ratio of the second to the first cationic polymer is between 0.01:10 and 1:4.

Claim 2 (Currently Amended): ~~A composition~~ The composition according to claim 1, wherein the first cationic polymer has a weight-average molecular weight higher than 1 million.

Claim 3 (Currently Amended): ~~A composition~~ The composition according to claim 1, wherein the second cationic polymer has a weight-average molecular weight lower than 1 million.

Claim 4 (Currently Amended): ~~A composition~~ The composition according to claim 1, wherein the first cationic polymer is formed using cationic monomers selected from the group of cationized esters and amides of (meth)acrylic acid, in each case containing a quaternized N atom.

Claim 5 (Currently Amended): ~~A composition~~ The composition according to claim 1, wherein the second cationic polymer is formed using cationic monomers selected from the group comprising diallyldimethylammonium chloride and the cationized esters and amides of (meth)acrylic acid, in each case containing a quaternized N atom, ~~preferably quaternized dimethylaminopropylacrylamide, quaternized dimethylaminoethyl acrylate and/or diallyldimethylammonium chloride.~~

Claim 6 (Currently Amended): ~~A composition~~ The composition according to claim 4, wherein copolymerized with further, nonionic water-soluble monomers.

Claim 7 (Currently Amended): ~~A composition~~ The composition according to claim 1, wherein the first cationic polymer is composed of 20 to 90 wt% of cationic monomers.

Claim 8 (Currently Amended): ~~A composition~~ The composition according to claim 1, wherein the second cationic polymer is composed of 70 to 100 wt% of cationic monomers.

Claim 9 (Currently Amended): ~~A composition~~ The composition according to claim 1, wherein the first cationic polymer has a lower charge density than the second cationic polymer.

Claim 10 (Previously Presented): A method for producing polymer compositions of claim 1 the method comprising:

providing polymers that comprise at least two cationic polymers of different composition in the cationic groups, wherein a first cationic polymer is subjected to radical polymerization by adiabatic gel polymerization of the monomer constituents in the presence

of a second cationic polymer in aqueous solution, and the ratio of the second to the first cationic polymer is between 0.01:10 and 1:4,

preparing the aqueous solution of cationic monomers and the second cationic polymer with a concentration of 10 to 60 wt%, wherein the start temperature for the polymerization is adjusted to a range of -10°C to 25°C, and oxygen is purged by an inert gas,

starting the exothermic polymerization reaction of the monomers by adding a polymerization initiator, and heating the polymerization mixture and forming a polymer gel up to its maximum temperature, and

subjecting the polymer gel to mechanical size reduction and drying the polymer gel after the maximum temperature has been reached.

Claim 11 (Previously Presented): The method according to claim 10, wherein the start temperature of polymerization is adjusted to a range of 0°C to 15°C.

Claim 12 (Previously Presented): The method according to claim 10, wherein the concentration of the aqueous solution of monomers and the second cationic polymer is 15 to 50 wt%.

Claim 13 (Previously Presented): The method according to claim 10, wherein the polymerization initiator comprises a redox system or a system that can be activated by UV radiation.

Claim 14 (Previously Presented): The method according to claim 10, wherein the polymerization is carried out on a polymerization belt.

Claim 15 (Previously Presented): The method according to claim 10, wherein after size reduction, the aqueous polymer gel is dried at temperatures of 80°C to 120°C to a moisture content of less than or equal to 12.

Claim 16 (Previously Presented): A method for promoting flocculation during solid/liquid separation, the method comprising:

adding the polymer composition of claim 1 to a mixture of solids and liquids.

Claim 17 (Previously Presented): The method according to claim 16, wherein the solid/liquid separation is for purification of wastewaters and for conditioning of potable water.

Claim 18 (Previously Presented): The method according to claim 16, wherein the solid/liquid separation is during paper manufacture.

Claim 19 (Currently Amended): ~~A composition~~ The composition according to claim 4, wherein the group of cationic monomers includes quaternized dimethylaminopropylacrylamide and quaternized dimethylaminoethyl acrylate.

Claim 20 (Currently Amended): ~~A composition~~ The composition according to claim 5, wherein the group of cationic monomers includes quaternized dimethylaminopropylacrylamide, quaternized dimethylaminoethyl acrylate and/or diallyldimethylammonium chloride.